Australia: Two Decades of Reforms Without Result

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Abstract

In this article, I analyze the experience of Australia - a country that over the past two decades has spent billions of dollars on educational reforms, but has been unable to stop the decline in the quality of education. From the "educational revolution" of the late 2000s to the Better and Fairer Schools Agreement of 2025, Australian reforms represent a classic example of how systemic changes, even with significant funding, may fail to yield expected results [5]. Relying on PISA and NAPLAN data, research from the Grattan Institute, the Centre for Independent Studies, and the Australian Secondary Principals Association, as well as an analysis of teacher education and curriculum reforms [7], [8], I show that the Australian experience is both instructive and alarming. Since 2000, PISA results in Australia have steadily declined: by more than a year of schooling in mathematics, by a year and a half in reading, and by a year in science [3]. About a third of students do not reach the basic level of literacy and numeracy [9]. At the same time, government funding per student has doubled since 2008 and exceeds 21,000 dollars per year [6], [8]. I also show that the Australian model, despite its external appeal to supporters of "evidence-based reforms," fundamentally diverges from the communicative-cognitive framework of personality (CCFP) model: it is oriented towards testing rather than thinking development; it focuses on basic skills rather than mental mechanisms; it standardizes rather than individualizes [11], [12].

Keywords: Australia, PISA, NAPLAN, educational reform, Gonski, Better and Fairer Schools Agreement, explicit instruction, teacher education, communicative-cognitive framework of personality.

Introduction: Why Australia

Australia is a country that has always held a special interest for me when it comes to educational reforms. And not because its system is a model to emulate. Rather the opposite - because it represents, perhaps, the most striking example of how systemic reforms, backed by significant funding, can fail to deliver expected results over decades [5].

Here it is appropriate to recall the image of Sisyphus from ancient Greek myth. Sisyphus was condemned by the gods to eternally roll a huge boulder up a hill. Every time he almost reached the top, the boulder rolled back down, and Sisyphus had to start all over again. Australian educational reformers remind me of this Sisyphus. They roll the boulder of reforms up the hill - introducing new standards, new tests, new programs, new requirements for teachers. They almost reach the summit - it seems that results are about to improve. But the boulder rolls back down again - PISA results fall, inequality grows, teachers burn out. And Sisyphus starts over. Twenty years. Billions of dollars. And the same boulder at the foot of the mountain.

In the early 2000s, Australia was among the world's educational leaders. In 2006, the country ranked 6th in the world in reading, 6th in science, and 8th in mathematics according to PISA [3]. Today, less than two decades later, Australia has dropped to 12th in reading, 10th in science, and 16th in mathematics. This decline occurred despite the fact that government funding per student has effectively doubled since 2008, reaching over 21,000 dollars per year, and the total volume of government school funding in 2025 amounted to about 90 billion dollars [6], [8].

As Stephen Schwartz, former chair of the ACARA board (the body responsible for NAPLAN), notes, "NAPLAN is not so much a mirror as a hall of mirrors, and we are its distorted reflections" [3]. While NAPLAN shows "stability" in results, PISA - a comparison with international peers - "tells a much darker story." It is precisely this contradiction - between the scale of investments and the lack of results, between the stability of national tests and the decline in

international comparisons - that makes the Australian experience, in my view, one of the most instructive for anyone thinking about the transformation of education [11].

Historical Context and Reasons for Reforms

Australian educational reforms of the last two decades originate in the so-called "educational revolution" of the late 2000s. As the research notes, "despite continuous reforms and growing investments over the past two decades, achievement - and especially equitable achievement - in Australian schools is not improving. Moreover, in many respects, it is deteriorating" [5]. A key moment was the realization that the industrial model of education, oriented towards knowledge transmission, does not meet the challenges of the 21st century. However, unlike Finland or Singapore, Australia has been unable to offer a consistent alternative [4].

In 2011, David Gonski presented his famous review, which recommended the introduction of the Schooling Resource Standard (SRS) - a minimum level of funding for all schools, with additional funds for schools working with the most disadvantaged students [8]. As the research notes, "the previous five-year National School Reform Agreement increased federal funding to 20% of the SRS, but - as the Productivity Commission noted in its 2022 review - it failed to substantially improve student outcomes" [8]. In 2025, a new Better and Fairer Schools Agreement was signed, which was supposed to increase federal funding for public schools from 20% to 25% of the SRS. However, as the research notes, "much of this funding is pushed far into the 2030s - meaning that a 7th-grade student today may not see the real benefits of these investments until they finish school" [8].

The central element of Australian reforms has been NAPLAN (National Assessment Program - Literacy and Numeracy) - a national assessment program for literacy and numeracy conducted annually for students in grades 3, 5, 7, and 9 [3]. However, as former ACARA board chair Stephen Schwartz notes, NAPLAN was not originally intended to measure how Australia looks against the rest of the world. "NAPLAN is not a bad tool. When used for its intended purpose - tracking general trends, identifying struggling students, and supporting curriculum implementation - it has value." However, politicians use NAPLAN results as proof of improvement, even though they do not reflect the real state of affairs [3]. In 2023, ACARA launched a new NAPLAN reporting system. The familiar ten levels and national minimum standards were replaced by four broad categories: "Needs Additional Support," "Developing," "Strong," and "Exceeding." As Schwartz ironically remarks, "this is like rearranging deck chairs on the Titanic and then declaring that the ship has become more comfortable" [3].

The second key direction of reform has been the restructuring of teacher education. As the research notes, "almost two years have passed since a major review of teacher education recommended 14 reforms to radically transform degree courses" [7]. By the end of 2025, 37 Australian universities were required to modify about 280 courses to include "core content." Universities received grants of 15,000 dollars to make changes, with the core content focusing on how students' brains acquire and retain information, explicit phonics instruction, responding to student learning in real time, and classroom management [7]. Joanna Barbousas, Dean of the School of Education at La Trobe University, rewrote the university's education courses in 2020, "removing philosophical and sociological subjects that did not align with evidence-based teaching methods." As she noted, "we listened to what school principals were saying - often graduates of education programs had to retrain when they entered the classroom" [7]. The restructuring of courses meant abandoning long-debunked theories, such as "learning styles." However, the reforms have faced criticism. As the research notes, "education experts have criticized the lack of consultation with teachers and teacher educators, which, according to John Nicholas Saunders, president of the Australian Education Union, leads to reforms that are 'impractical, ineffective, and disconnected from the classroom'" [7].

The third direction of reform has been a return to the "basics" - reading, writing, mathematics, and science. As noted in the Liberal Party plan, "the Dutton government will return the 'back to basics' agenda to our classrooms, prioritizing reading, writing, mathematics, and science, especially in the early years of schooling" [2]. A key element of this approach is explicit instruction - a method in which concepts are clearly explained, modeled, and then practiced by students. As the research notes, explicit instruction is "increasingly recognized as an evidence-based approach to teaching that aligns with data on how students learn, and is also a powerful tool for improving educational equity" [2].

For the CCFP model, the Australian experience is important precisely because of its one-sidedness. The reform of teacher education took a step towards "evidence-based methods" - explicit instruction, phonics, classroom

management. These are important tools. But they remain tools for knowledge transmission, not tools for thinking development. The mental mechanisms discussed in my model are specific tools of thinking, each of which can be diagnosed, evaluated in dynamics, and purposefully developed [12]. Australia took a step from "theories" to "evidence," but did not take the next step - from "evidence" to "mental mechanisms." Moreover, the reform was conducted from the top down, without consultation with teachers and teacher educators, creating a gap between declarations and practice. It is precisely this step - from "evidence-based methods" to "thinking development" - that constitutes the essence of the CCFP model.

Positive Experience and Achievements

Despite the overall picture of stagnation, Australian reforms have had some positive aspects. The first and perhaps main achievement is the recognition of the scale of the problem and the need for systemic changes. As the Grattan Institute notes, "increased federal funding is tied to practical, evidence-based reforms and new targeted student learning goals" [5]. Researchers also note that "reforms are moving in the right direction - in particular, the emphasis on strengthening professional development and improving curricula and assessment tools for teachers" [4].

The second achievement has been the focus on early intervention. As noted in the reform plan, "early identification is key." The introduction of phonics checks in Year 1 and similar checks in mathematics, as well as support for struggling students through "multi-tiered systems of support," are important steps [2]. The third achievement is the rejection of long-debunked theories in teacher education. As the research notes, the restructuring of education courses meant abandoning the "myth that students benefit from receiving information in their preferred format" (the theory of learning styles) [7].

For the CCFP model, these achievements are not just "positive experience," but conditions of possibility. Recognizing the need for systemic changes, focusing on early intervention, and rejecting outdated theories - all this creates an environment in which the formation of mental mechanisms becomes possible [12]. But a condition of possibility is not the same as a sufficient cause. Australia has created the environment and recognized the need for change, but has not created a system for diagnosing and developing specific mechanisms. Moreover, the orientation towards "basics" and explicit instruction works against thinking development, focusing students on correct answers rather than the reasoning process. This is why Australia's achievements remain fragile: they are held together by the recognition of the problem and evidence-based methods, but are not underpinned by the technology of forming a cognitive apparatus.

Negative Consequences and Challenges

However, the positive effects of Australian reforms have proven modest compared to the scale of the problems. The most alarming consequence is the steady decline in Australia's PISA results. As the research notes, "since 2000, PISA results in Australia have fallen by 33-24 points in mathematics, reading, and science" [3]. In mathematics, the average 15-year-old student today performs more than a year of schooling below their peers in 2000. In reading, the decline has been a year and a half, and in science, a year. As the research notes, "in mathematics alone, 15-year-old Australians are more than a year of schooling behind their 2000 peers; and nearly two years behind since the first testing in 2003." At the same time, the gap between students from privileged and disadvantaged families continues to widen. Aboriginal and Torres Strait Islander students continue to lag significantly behind across all indicators [9].

Here it is appropriate to recall the image of the "lost child" - one of the central motifs of Australian literature. From Joan Lindsay's "Picnic at Hanging Rock" to poems about children lost in the vast, indifferent bush, Australian culture is obsessed with the idea of being lost, of disappearing in an immense, indifferent space. The Australian education system itself has become such a "lost child." It has become lost in its reforms, in endless tests, in a stream of conflicting demands. It has lost its main goal - the development of thinking - and cannot find its way back.

The second problem is the paradox of "high costs with zero results." As the Centre for Independent Studies research notes, "new NAPLAN results show that the Australian education system is stuck in a state of high-spend stagnation - with static achievement, persistent gaps, and learning outcomes that do not reflect the scale of government investment" [6]. As Glenn Fahey, Director of Education at the Centre for Independent Studies, notes, "the best that can be said about the education system is that Australia's results have not fallen as much as those of rival countries in recent years, but that is hardly a cause for celebration." The third problem is the crisis of school attendance and student retention. As the research notes, "school attendance is declining, and Year 12 retention is reversing" [5]. In

public schools, attendance has dropped sharply over the past five years: only 56.3% of students attend school more than 90% of the time. The Year 12 completion rate has fallen from 82% in 2019 to 78.7%.

The fourth problem is growing inequality. As the research notes, "one in three students in regional areas do not reach the level of literacy and numeracy proficiency according to NAPLAN data" [9]. Among students from disadvantaged families, one in three does not meet the minimum standards of literacy and numeracy. In Queensland and Tasmania, about 40% of students do not have adequate literacy or numeracy skills. In the Northern Territory, it is almost 60%. The fifth problem is the growing criticism of NAPLAN. As the research notes, "NAPLAN is not so much a mirror as a hall of mirrors, and we are its distorted reflections." The Australian Secondary Principals Association has called for the NAPLAN writing test to be axed, expressing "serious concerns" about the "fairness, consistency, and validity" of writing assessment in Year 5 [10].

The sixth problem is the gap between reforms and real classroom practice. As the Grattan Institute research notes, "it is entirely possible that, in order not to offend conflicting stakeholders, governments will dilute reforms to such an extent that nothing substantially changes" [5]. Researchers also note that "high-level policy changes can improve student outcomes only if they directly impact classroom practice."

For the CCFP model, these negative consequences are not just "problems of the Australian school." They are symptoms of a deeper phenomenon: a reform that changes declarations and structures, but does not change the cognitive apparatus of the participants, inevitably reproduces the old paradigm [11], [12]. The drop in PISA, high costs with zero results, the attendance crisis, inequality, criticism of NAPLAN, the gap between reforms and practice - all these are consequences of the fact that the Australian reform did not place the diagnosis and development of specific mental mechanisms at the center. It changed the "what" and "how" of education, but did not change the "with what" - the cognitive tool used by both the teacher and the student. Moreover, NAPLAN and the orientation towards "basics" actively reproduce a cognitive apparatus inadequate for solving "hard problems" [12].

Contradictions with the CCFP Model

Now I want to move on to what is most important to me: the fundamental differences between the Australian model and the communicative-cognitive framework of personality (CCFP) model [11], [12]. The first and most fundamental difference: the Australian model is oriented towards testing, not thinking development [3], [12]. NAPLAN and PISA have become the main drivers of educational policy. As the research notes, "the race for high ATAR scores dominates among students from wealthy families." The entire system is subordinated to test preparation, not thinking development. In my model, on the contrary, the diagnosis of mental mechanism development is central [12]. I propose evaluating not a static level of knowledge, but dynamics - progress in the development of each of the eleven mechanisms. The Australian model does not answer the question: which specific thinking mechanisms should we develop?

The second difference: the Australian model focuses on basic skills (reading, writing, mathematics) rather than mental mechanisms [2], [12]. The Liberal Party's "Back to Basics" plan prioritizes "reading, writing, mathematics, and science." These are important skills, but they do not constitute the foundation of thinking. They are content, not tools. My model, on the contrary, offers eleven mental mechanisms as specific tools of thinking: establishing cause-and-effect relationships, critical thinking, Socratic dialogue, spatial imagination, forecasting, and others [12]. Basic skills are the material for developing these mechanisms, not the end goal.

The third difference: the Australian model is built on standardization, while mine is built on individualization [3], [12]. NAPLAN is a unified test for all students. It does not take into account individual characteristics, unique abilities, or different developmental trajectories. My model, on the contrary, is built on individualization through unique abilities [12]. Every child is unique, and their unique abilities should become the "entry point" for the development of all other mental mechanisms. The fourth difference: the Australian model relies on explicit instruction, while mine relies on developing thinking as a process [2], [12]. Explicit instruction is a method in which "a concept is explained, modeled, and then practiced by students." This is an effective method for transmitting knowledge, but it does not develop thinking as such. It teaches children what to think, but not how to think. My model, on the contrary, places the development of thinking itself at the center - the ability to ask questions, establish connections, critically evaluate, and forecast.

And finally, the most important difference. The Australian model, like most other educational models, does not realize the epistemological significance of developing thinking [11]. As I substantiated in the article "Epistemological Recursion in Cognitive Science," modern neuroscience is stuck in the "trap of correlations": we record the results of brain activity, but we do not understand the mechanism of its self-organization. The way out of this dead end lies not in the plane of creating even more powerful scanners, but in the plane of the evolution of the knowing subject itself. The Australian model does not set itself this task [3]. It does not understand that the development of mental mechanisms in children today is the preparation of the very cognitive apparatus that tomorrow will be able to deconstruct the logic of its own brain [12].

Conclusions and Lessons

What can we take away from the Australian experience? The first lesson: reforms without a systemic approach do not work [5]. Australia has spent billions on reforms, but has been unable to stop the decline in the quality of education. As the research notes, "despite continuous reforms and growing investments over the past two decades, achievement in Australian schools is not improving." The second lesson: testing is not equal to development [3]. NAPLAN and PISA have become the main drivers of educational policy, but they have not led to an improvement in students' thinking. As the former ACARA chair noted, NAPLAN is a "hall of mirrors." The third lesson: funding without reform is a waste of resources [6], [8]. Government funding per student has doubled since 2008, but results have not improved. As the research notes, "there are no Gonski dividends."

The fourth, and most important lesson for me: without a systemic approach to thinking development, any reforms remain cosmetic [12]. Australia introduced NAPLAN, reformed teacher education, and returned to the "basics" - but it did not create a system for diagnosing and developing mental mechanisms. The Australian experience shows that educational reforms are not just about increasing funding, not just introducing new tests, not just returning to the "basics." It is a paradigm shift - from the conveyor-belt school to the school of thinking, from testing to development, from standardization to individualization.

It is precisely this paradigm shift that the CCFP model offers [12]. It answers the questions that Australian reforms have left unanswered. Which specific thinking mechanisms should we develop? Eleven mental mechanisms, each of which is operationally defined. How will we diagnose their development? Through dynamic diagnostics, evaluating progress rather than a static level. How will we take into account the uniqueness of each child? Through individualization, where unique abilities become the "entry point" for the development of all other mechanisms. Why do we need all this? Not only for "improving test results," but so that humanity can solve the "hard problems" of the 21st century, including the mystery of consciousness [11].

Here I would like to recall Patrick White, the great Australian writer and Nobel laureate. In his novel "The Tree of Man," the main character, Stan Parker, spends his whole life trying to understand the meaning of his existence in a vast, indifferent world. He clears the forest, builds a house, raises children, but never finds a final answer. The Australian education system reminds me of this character. It clears the forest of reforms, builds a house of tests, raises children for exams, but still cannot find the answer to the main question: how to teach a child to think? It has become lost in its own "tree of man" - in the endless branches of reforms, standards, and tests - and cannot find its way to the root. And the root is thinking. It is the development of mental mechanisms. It is what the CCFP model is trying to return to the center of education.

Australia has shown us that educational reforms without a paradigm shift are doomed to fail [5]. And this lesson, in my view, is one of the most important for anyone thinking about the future of education.

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